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**Honjo et al.**

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(54) **PRESENCE AND DIRECTIONAL MOTION DETECTION**

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CPC ..... **H05B 47/105** (2020.01); **F21V 23/045** (2013.01); **F21V 23/0471** (2013.01); **G06N 20/00** (2019.01)

(58) **Field of Classification Search**

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See application file for complete search history.

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(57) **ABSTRACT**

Systems and techniques are provided for presence and directional motion detection. Signals may be received from a sensor positioned in a structure. An indication of directional motion may be generated based on the signals from the sensor. The indication of directional motion may be generated without using signals from additional sensors. A control signal for a device in the structure may be generated in response to the indication of directional motion. The control signal may be sent to the device in the structure to be implemented by the device.

**30 Claims, 29 Drawing Sheets**

